

CLAIMS

WHAT IS CLAIMED IS:

1. A wafer comprising:

a first surface;

5 a second surface;

a first scribe line coupled to said first surface,  
said first scribe line extending in a first direction;

10 a second scribe line coupled to said first surface,  
said second scribe line extending in a second direction  
perpendicular to said first direction; and

15 a first alignment mark formed at an intersection of  
said first scribe line and said second scribe line, said  
first alignment mark extending from said first surface to  
said second surface.

15

2. The wafer of Claim 1 further comprising a scribe  
grid comprising said first scribe line and said second  
scribe line.

20

3. The wafer of Claim 2 further comprising  
electronic components delineated by said scribe grid.

25 4. The wafer of Claim 3 wherein said electronic  
components are selected from the group consisting of  
integrated circuits, micromachine chips and image sensor  
chips.

30 5. The wafer of Claim 3 wherein said electronic  
components comprise bond pads coupled to said first  
surface.

6. The wafer of Claim 3 wherein said electronic  
components comprise active areas coupled to said first  
surface.

35

7. The wafer of Claim 1 further comprising a flat  
extending in said second direction.

8. The wafer of Claim 1 wherein said first scribe line delineates a first electronic component from a second electronic component.

5 9. The wafer of Claim 8 wherein said second scribe line delineates said second electronic component from a third electronic component.

10 10. The wafer of Claim 1 wherein said first alignment mark is an aperture.

11. The wafer of Claim 1 further comprising a first plurality of alignment marks comprising said first alignment mark, said first plurality of alignment marks extending from said first surface to said second surface.

12. The wafer of Claim 11 wherein said first plurality of alignment marks are aligned with said first scribe line.

20 13. The wafer of Claim 12 further comprising a second plurality of alignment marks aligned with a third scribe line coupled to said first surface and extending in said second direction.

25 14. The wafer of Claim 11 wherein said first plurality of alignment marks define a first line, said first line being aligned with said first scribe line.

30 15. The wafer of Claim 14 further comprising a second plurality of alignment marks defining a second line, said second line being aligned with a third scribe line coupled to said first surface and extending in said second direction.

35 16. A structure comprising:  
a substrate comprising a front-side surface and a back-side surface;

a wafer support coupled to said front-side surface, said wafer support comprising an exterior surface;

a first scribe line coupled to said front-side surface; and

5 a first back-side alignment mark extending from said exterior surface of said wafer support to said back-side surface of said substrate, said first back-side alignment mark being formed along said first scribe line.

10 17. The structure of Claim 16 wherein said wafer support is adhesively attached to said front-side surface of said substrate.

15 18. The structure of Claim 17 wherein said wafer support comprises an adhesive interior surface coupled to said front-side surface of said substrate.

19. The structure of Claim 16 wherein said wafer support comprises a tape.

20 20. The structure of Claim 16 wherein said wafer support is sufficiently transparent to allow said first scribe line to be recognized through said wafer support.

25 21. The structure of Claim 16 wherein said wafer support is ultraviolet radiation curable.

22. The structure of Claim 16 wherein said substrate comprises an electronic component delineated by 30 said first scribe line, said electronic component comprising an active area on said front-side surface of said substrate, said wafer support comprising a cavity aligned above said active area.

35 23. A wafer comprising:

a first surface;

a second surface;

a scribe grid coupled to said first surface;

a plurality of alignment marks extending from said first surface to said second surface, said plurality of alignment marks having a positional relationship to said scribe grid.

5

24. The wafer of Claim 23 wherein said scribe grid comprises a horizontal scribe line, a first set of said plurality of alignment marks being aligned with said horizontal scribe line.

10

25. The wafer of Claim 24 wherein said scribe grid comprises a vertical scribe line, a second set of said plurality of alignment marks being aligned with said vertical scribe line.

15

26. A structure comprising:

a substrate comprising a first surface and a second surface;

a scribe line coupled to said first surface;

20 means for supporting said substrate coupled to said first surface;

means for determining a position of said scribe line from said second surface of said substrate.

25

27. The structure of Claim 26 wherein said means for supporting comprises means for adhesively coupling said means for supporting to said first surface of said substrate.

30

28. The structure of Claim 26 wherein said means for determining extends through said substrate from said first surface to said second surface.

35

29. The structure of Claim 28 wherein said means for determining extends through said means for supporting.